

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (currently amended): A heat exchanger comprising:

a pair of headers extending ~~upward or downward~~ in a vertical direction and spaced apart from each other, the headers including a receiver-fixed header;

a plurality of refrigerant tubes arranged one above another in parallel at a spacing between the pair of headers and having opposite ends joined to the respective headers[[,]];

a plurality of fins arranged between respective adjacent pairs of the refrigerant tubes;
~~and;~~

a liquid receiver fixed to ~~one of the receiver-fixed header-headers;~~ and

a receiver connecting block [[being]] fixed to a peripheral wall of the receiver-fixed header and having a plurality of channels for causing communicating an interior portion of the receiver-fixed header ~~to communicate~~ with an interior portion of the liquid receiver therethrough,

wherein the liquid receiver [[being]] is fixed to the connecting block, the connecting block and the liquid receiver [[being]] is provided with respective fixing portions having respective contact faces in intimate contact with each other, the fixing portions of the connecting block and the liquid receiver have outer peripheral surfaces which are cylindrical surfaces sharing a same outside diameter, the liquid receiver [[being]] is fixed to the connecting block by at least one screw with the contact faces of the fixing portions in intimate contact with each other, a seal member [[being]] is liquid-tightly provided around respective outer peripheral surfaces of [[both]] the fixing portions of the connecting block and the liquid receiver so as to cover a boundary between the contact faces of the fixing portion of the block and the fixing portion of the liquid receiver, the seal member is tubular and has rubber elasticity, and the seal member has an inner shape smaller than contours of the

outer peripheral surfaces of the fixing portions of the block and the liquid receiver and is fitted as elastically deformed around the fixing portion of the connecting block and the fixing portion of the liquid receiver in intimate contact with the outer peripheral surfaces of the fixing portions by elastic force of the seal member.

Claim 2 (original): A heat exchanger according to claim 1 wherein the outer peripheral surfaces of the fixing portions of the block and the liquid receiver have respective contours of the same shape and the same size.

Claim 3 (original): A heat exchanger according to claim 1 wherein the seal member covers the outer peripheral surfaces of the fixing portion of the block and the fixing portion of the liquid receiver each over a length of at least 5 mm in the direction of thickness of the fixing portion.

Claim 4 (canceled)

Claim 5 (original): A heat exchanger according to claim 4 wherein the tubular seal member is provided in an inner peripheral surface thereof with a plurality of annular seal grooves over the entire circumference thereof.

Claim 6 (original): A heat exchanger according to claim 4 wherein the outer peripheral surfaces of the fixing portions of the block and the liquid receiver have respective contours of the same shape and the same size, are each in the form of a cylindrical surface and each have a circular contour, the tubular seal member being cylindrical, and assuming that the outside diameter of the fixing portions of the block and the liquid receiver is d and that the inside diameter of the tubular seal member to be fitted around the fixing portions is D , these diameters have the relationship of $0.7d < D < d$.

Claim 7 (original): A heat exchanger according to claim 4 wherein the tubular seal member is made from a rubber selected from the group consisting of silicone rubber, ethylene

propylene rubber, butadiene-acrylonitrile rubber and hydrogenated butadiene-acrylonitrile rubber.

Claim 8 (original): A heat exchanger according to claim 1 wherein the seal member comprises a thermally shrinkable tube.

Claim 9 (currently amended): A unit-type heat exchanger comprising a heat exchanger according to claim 1 wherein the ~~receiver-fixed header and the other header~~ headers are internally divided at portions thereof at ~~[[the]]~~ a same level to thereby provide a condenser portion ~~having the function of a condenser~~ and a supercooler portion positioned below the condenser portion ~~and having the function of a supercooler~~, the receiver connecting block having channels permitting a refrigerant flowing out of the condenser portion to pass through the interior portion of the liquid receiver and to flow into the supercooler portion.

Claim 10 (previously presented): A refrigeration cycle having a compressor, a condenser, an expansion valve and an evaporator, the condenser comprising a heat exchanger according to claim 1.

Claim 11 (original): A vehicle having installed therein the refrigeration cycle according to claim 10 as an air conditioner.

Claim 12 (original): A refrigeration cycle comprising a compressor, a unit-type heat exchanger according to claim 9, an expansion valve and an evaporator.

Claim 13 (original): A vehicle having installed therein the refrigeration cycle according to claim 12 as an air conditioner.

Claim 14 (original): A process for fabricating a heat exchanger according to claim 1 including:

arranging a plurality of refrigerant tubes one above another in parallel at a spacing between a pair of headers extending upward or downward and spaced apart from each other,

arranging fins between respective adjacent pairs of heat exchange tubes, providing a receiver connecting block for one of the headers and collectively brazing the resulting arrangement,

applying a volatile lubricant to an outer peripheral surface of at least one of a fixing portion of the block and a fixing portion of a liquid receiver and thereafter fitting a tubular seal member around the outer peripheral surface of the fixing portion having the lubricant applied thereto, and

fastening the liquid receiver to the block with contact faces of the fixing portions of the block and the liquid receiver in intimate contact with each other and thereafter shifting the tubular seal member to place the tubular seal member around both the fixing portions so as to cover a boundary between the contact faces of the fixing portions.

Claim 15 (currently amended): A refrigerant passage portion connecting structure for a refrigeration cycle comprising:

two blocks each having a channel communicating with a refrigerant passage portion of ~~[[the]]~~ a refrigeration cycle, the two blocks having respective fixing portions and respective contact faces each provided on a respective one of the fixing portion portions and to be positioned in intimate contact with each other, the channel having one end opened in the contact face, the fixing portions of the two blocks have outer peripheral surfaces which are cylindrical surfaces sharing a same outside diameter, the two blocks being fastened together with the contact faces of ~~[[their]]~~ the fixing portions by at least one screw in intimate contact with each other and with ~~[[their]]~~ the channels communicating with each other~~[[,]]~~; and

a seal member ~~[[being]]~~ liquid-tightly provided around outer peripheral surfaces of the fixing portions of the two blocks so as to cover a boundary between the contact faces of the fixing portions,

wherein the seal member is tubular and has rubber elasticity, and the seal member has an inner shape smaller than contours of the outer peripheral surfaces of the fixing portions of

the two blocks and is fitted as elastically deformed around the fixing portions of the two blocks in intimate contact with the outer peripheral surfaces of the fixing portions by elastic force of the seal member.

Claim 16 (withdrawn): A refrigerant passage portion connecting structure for a refrigeration cycle comprising a first block having a channel communicating with a refrigerant passage portion of the refrigeration cycle, a pipe having an end portion fittable into the channel of the first block and connectable to the first block, and a second block for fixing the pipe to the first block, the two blocks having respective fixing portions and respective contact faces each provided on the fixing portion and to be positioned in intimate contact with each other, the two blocks being fastened together with the contact faces of their fixing portions in intimate contact with each other and with the pipe end portion fitted in the channel of the first block, a seal member being liquid-tightly provided around outer peripheral surfaces of the fixing portions of the two blocks so as to cover a boundary between the contact faces of the fixing portions.

Claim 17 (previously presented d): A refrigerant passage portion connecting structure for a refrigeration cycle according to claim 15 wherein the outer peripheral surfaces of the fixing portions of the two blocks have respective contours of the same shape and the same size.

Claim 18 (previously presented): A refrigerant passage portion connecting structure for a refrigeration cycle according to claim 15 wherein the seal member covers the outer peripheral surfaces of the fixing portions of the two blocks each over a length of at least 5 mm in the direction of thickness of the fixing portion.

Claim 19 (canceled)

Claim 20 (original): A refrigerant passage portion connecting structure for a refrigeration cycle according to claim 19 wherein the tubular seal member is provided in an

inner peripheral surface thereof with a plurality of annular seal grooves over the entire circumference thereof.

Claim 21 (original): A refrigerant passage portion connecting structure for a refrigeration cycle according to claim 19 wherein the outer peripheral surfaces of the fixing portions of the two blocks have respective contours of the same shape and the same size, are each in the form of a cylindrical surface and each have a circular contour, the tubular seal member being cylindrical, and assuming that the outside diameter of the fixing portions of the two blocks is d and that the inside diameter of the tubular seal member to be fitted around the fixing portions is D , these diameters have the relationship of $0.7d < D < d$.

Claim 22 (original): A refrigerant passage portion connecting structure for a refrigeration cycle according to claim 19 wherein the tubular seal member is made from a rubber selected from the group consisting of silicone rubber, ethylene propylene rubber, butadiene-acrylonitrile rubber and hydrogenated butadiene-acrylonitrile rubber.

Claim 23 (previously presented): A refrigerant passage portion connecting structure for a refrigeration cycle according to claim 15 wherein the seal member comprises a thermally shrinkable tube.

Claim 24 (previously presented): A process for fabricating a refrigerant passage portion connecting structure for a refrigeration cycle according to claim 15 including:

applying a volatile lubricant to an outer peripheral surface of a fixing portion of at least one of two blocks and thereafter fitting a tubular seal member around the outer peripheral surface of the fixing portion having the lubricant applied thereto, and

fastening the two blocks together with contact faces of the fixing portions of the blocks in intimate contact with each other and thereafter shifting the tubular seal member to place the tubular seal member around both the fixing portions so as to cover a boundary between the contact faces of the fixing portions.

Claim 25 (new): A heat exchanger according to claim 1 wherein the seal member has a lower end portion which is in contact with the connecting block.

Claim 26 (new): A refrigerant passage portion connecting structure according to claim 15 wherein the seal member has a lower end portion which is in contact with one of the connecting blocks.